# **Economic and Financial Review**

Volume 33 | Number 1

Article 3

3-1995

# A Review and Analysis of Agricultural Prices in Nigeria, 1977 -1993

O. O. Akanji Central Bank of Nigeria

E. U. Ukeje Central Bank of Nigeria, euukeje@cbn.gov.ng

Follow this and additional works at: https://dc.cbn.gov.ng/efr

Part of the Agricultural and Resource Economics Commons, Business Commons, and the Economics Commons

## **Recommended Citation**

Akanji, O. O. & Ukeje, E. U. (1995). A Review and Analysis of Agricultural Prices in Nigeria, 1977 - 1993. CBN Economic and Financial Review. 33(1). 35-61.

This Article is brought to you for free and open access by CBN Institutional Repository. It has been accepted for inclusion in Economic and Financial Review by an authorized editor of CBN Institutional Repository. For more information, please contact dc@cbn.gov.ng.

# A Review and Analysis of Agricultural Prices in Nigeria, 1977-1993

by

O. O. Akanji (Mrs)<sup>1</sup> and E. U. Ukeje

This paper reviews and analyses the various prices that have been in existence in the agricultural sector since the re-organization of the produce marketing system in 1977 to the present free market system. It was observed that a close relationship existed between the market prices and the determined prices. However, some upward revisions in the official prices were found to be neither rational nor based on any concrete study. Moreso, most commodities were implicitly taxed during the period 1977–1985. The increases in the prices recorded between 1986 1993 due to market liberalization had an added problem of marketing. The domestic market prices were exaggerated for round-tripping naira by merchants, the produce exported were of low, deteriorating quality and there were no buyers of last resort. The paper concluded that inspite of the problem of the liberalized produce market, it is still highly favoured and recommended that commodity market if established would address these problems.

The general belief that farmers/producers respond to increase in prices have led to the intervention by different governments from independence to date. Governments have attempted to regulate prices and commodity flow through monopoly power granted to marketing boards. Other policy actions taken to influence commodity prices included commodity and export taxes, control of exports and imports of agricultural goods and exchange rate deregulation. The interventions in most cases were aimed at improving the performance of the agricultural sector. One of such measures was the reorganization of the all-purpose Regional/State Marketing Boards into specific commodity Boards in 1977. Simultaneously, a central machinery was evolved for the determination of produce prices as against the previous practice by which each Region/State marketing Boards fixed prices for commodities under its control. These measures were adopted in the belief that, by improving commodity prices periodically, farmers' incomes, as well as agricultural productivity, would be enhanced. This policy stance was specifically articulated in the Third National Development Plan and later enacted into law, by Decree 29 of 1977. However, by the end of 1985, it was obvious that the commodity boards could not achieve most of their functions as evidenced by their pricing policy which resulted in implicit taxation of farmers. It thus became evident that there was no way the government could sustain the existing marketing system, hence, the Boards were dissolved in December, 1986.

O. O. AKANJI (MRS) is a Deputy Director, Statistical Services Division, Research Department while Mr E. U. Ukeje
is a Principal Economist in the Agric Studies Office, Real Sector Division. The views expressed in this paper are those
of the authors.

The dissolution of the commodity boards marked the fulfilment of one of the cardinal elements of the Structural Adjustment Programme i.e. trade liberalization. The fixing of producer/guaranteed minimum prices by government gave way to market determined prices for agricultural produce and ushered in a new era of trade liberalization for agricultural commodities. Under this system individuals/farmers were free to purchase and sell/export the commodities.

The objective of this paper is to review and analyse the various prices in existence in the agricultural sector from 1977. In so doing, the effect of these prices on agricultural output and domestic inflationary trends will be highlighted.

The rest of the paper is divided into four main parts. Part I deals with definitions of prices as well as the description of method of determination. Part II discusses the trends of various commodity prices since 1977 when the commodity marketing system was re-organised. Part III explains the effects on domestic prices, output and inflationary development on food prices in particular. Part IV highlights the advantages and disadvantages of the current pricing policies amplifying the establishment of a commodity exchange. The last part of the report embodies a summary and some concluding remark.

#### PART I

#### **DEFINITION AND DETERMINATION OF AGRICULTURAL PRICES**

Prices in the agricultural sector in the Nigerian context can be classified into two broad categories: free market prices and official prices.2 The free market prices are generally determined by the forces of supply and demand either in the world or domestic commodity markets. These prices include: (i) farm-gate prices, (ii) retail prices and (iii) world market prices. The determination of official prices<sup>3</sup> is also guided by supply/demand forces, but their magnitudes are usually influenced by other important socio-economic factors such as the need for efficient marketing and distribution and increased output of the commodities involved. These prices include: (i) producer prices, (ii) take-over prices, (iii) local sale prices and (iv) guaranteed minimum prices. The two categories are examined further below:

#### Free Market Prices

Farm-gate prices are the prices at which farmers sell commodities at the farm/rural level to individuals, wholesale distributors and local processors. The precise farm-gate price is difficult to determine, particularly in the absence of effective monitoring system and good record keeping on the part of the farmers. However, the rural market prices are taken as proxy for farm-gate prices, based on the assumption that distribution costs between farms and rural markets are very insignificant.4 Farm-gate prices are mostly in respect of staple food-crops but since farmers were allowed under the reformed Commodity Board System to sell any

<sup>2.</sup> It is also possible to classify the prices in various other ways such as those relating to exports as against those relating to produce for domestic use and those that operate at farm level as against those operating outside the farms.

<sup>3.</sup> The official prices are fixed by the Price Fixing Authority created under the reformed Marketing Board System in 1977.

<sup>4.</sup> In a country where the farm-gate market is quite defined to the rural market, there is usually a practical significant difference in the two and may not be used inter-changeably.

scheduled crop directly to local processors, cash crops<sup>5</sup> are also being sold at the farm level.

Retail prices are prices at which agricultural commodities, mostly staple food crops, are retailed in urban markets. Retail prices differ from farm-gate prices by the extent of marketing expenses incurred by wholesale and retail distributors.

World market (c.i.f.) prices, on the other hand, relate to Nigerian scheduled export crops and may be defined as the spot/futures prices quoted in international commodity markets such as London, New York, etc. for this category of commodities.<sup>6</sup> From the point of view of Commodity Boards, realised prices of the sale of such produce abroad were derived by netting out the freight and marine insurance components from the world (c.i.f.) prices, leaving the world market/export (f.o.b.) prices. Export (f.o.b.) prices are therefore the ex-Nigerian port prices of the export commodities.

#### Official Prices

Producer prices are defined as prices paid by Commodity Boards or their agents, the licensed buying agents to farmers in respect of scheduled export crops such as cocoa, coffee, groundnut etc. Like other official prices, producer prices are fixed by the Price Fixing Authority (who is the President) on the advice of the Technical Committee on produce Prices (TCPP). In arriving at the level of producer price for each crop in a buying season, the TCPP is expected to take into consideration current and projected trends in domestic and world prices, the levels of farm and marketing expenses, current as well as projected performance of the agricultural sector. A sub-committee of the TCPP, located in the Central Bank of Nigeria (Agricultural Finance Department), gave advise on technical aspects. Under the law setting up the Commodity Boards, the CBN was the sole financier of the boards' marketing operations.

Guaranteed minimum prices are prices paid by Commodity Boards for the scheduled staple food crops like maize, millet, guinea corn, rice, wheat and beans. They are also fixed by the Price Fixing Authority on the advice of the TCPP. Conceptually, these prices were intended to serve as fall-back prices for farmers, in the event that they are unable to sell all their crops at the going market prices. In arriving at the levels of guaranteed minimum prices each season, the TCPP is presumed to be guided by the prevailing and projected levels of production costs and retail prices in the whole country.

Take-over prices, on the other hand, are more or less accounting prices used for estimating the actual cost to Commodity Boards in acquiring each unit of the commodity and the level of subsidy required by them to support their purchases. Technically, therefore, take-over prices could be defined as the sum of producer prices and the corresponding marketing expenses which include a buying allowance, insurance charges, transportation costs, pest control costs, financial charges, processing fees etc.

Finally, local sale prices may be defined as Commodity Boards realised prices from sales to local processors. This price is the difference between market/export (f.o.b.) prices and such incidental expenses as harbour dues, shore handling charges and miscellaneous levies incurred in the process of preparing the commodities for export sale. By implication, therefore, local sale prices are lower than export (f.o.b.) prices, the aim being to induce the patronage of local

<sup>5. &</sup>quot;Cash" and "export" crops/commodities are used synonymously in this paper.

<sup>6.</sup> A spot price in the international commodity markets relates to produce which is for immediate delivery to buyer, while a future price concerns produce for delivery at a later date.

A licensed buying agent is one who is officially commissioned by a commodity board to plurchase produce directly
from farmers for delivery to specified storage depots.

processors to increase their activities.

### Relationship Between Free Market and Official Prices

A close relationship exists among some of the agricultural prices reviewed above, especially in respect of officially determined prices. For example, Commodity Board take-over prices represent the sum of producer prices and marketing expenses for the corresponding commodities. Also, local sale prices represent the difference between export sale prices and corresponding incidental expenses such as harbour dues, shore handling charges and other special levies on each commodity. Similarly, a comparison between official and free market prices help to throw light on the concepts of subsidy and surplus in the marketing of the scheduled commodities. For example, where producer prices are higher than world (c.i.f.) prices, this would imply a subsidy to both the Commodity Boards and producers. The reverse situation indicates a surplus. On the other hand if world (c.i.f.) prices are higher than the corresponding producer prices, but lower than take over prices, it shows that the subsidy is paid to enable Commodity Boards to meet their marketing expenses.

#### PART II

#### TRENDS IN AGRICULTURAL PRICES

Officially determined prices of scheduled agricultural commodities were generally on the increase during the period 1977-1995. This trend was largely in line with official policy of periodic upward revision of agricultural prices to ensure a reasonable level of income for farmers. With reference to the free market prices, retail and farm-gate prices, generally, moved upwards while world (c.i.f.) prices for most commodities fluctuated downwards.

#### Free Market Prices

Movements in farm-gate prices were broadly similar to that of the corresponding market retail prices. This is indicative of the largely homogenous nature of the markets for staple food crops in the country. The farm-gate prices of virtually all the scheduled food crops, except wheat, fluctuated upwards during the period 1977-1985 and, to a greater degree, during the 1986-1993 period (Table 1).

Retail prices of most staple food crops showed mixed movements during the period 1977-1985. For instance, the retail prices of all staples fluctuated upwards: guinea corn recorded average price increase of 18.8 per cent, the price of millet, maize, beans and milled rice increased by 15.8, 22.9, 18.5 and 21.4 per cent, respectively, on the average. The increase in retail prices were more pronounced during the period 1986-1993. During this period all retail prices for the scheduled commodities trended upwards with millet recording the highest growth of 40.8 per cent, followed by guinea corn with 39.2 per cent, maize, beans and rice rose, on the average, by 30.4, 30.4 and 33.7 per cent, respectively (Table 2). The reasons adduced for the upward trend in prices were the supply shortage resulting from drought of 1983, coupled with the speculative activities as a result of the political unrest culminating in hoarding.

The world prices in naira terms of all the scheduled export crops except copra and ginger fluctuated upwards during the period 1977-1985. The increase was more pronounced for soyabeans and rubber which increased by 21.2 and 15.2 per cent, respectively. During the period 1986–1993 most of the scheduled crops on the export list have vanished, leaving just about seven of the thirteen in the earlier period. There were remarkable increases in the world prices of the exported crops. The average increases for the period ranged from 17.8 per cent for rubber to 75.6 per cent for copra (Table 3). The increase in prices was attributed to the devaluation of naira exchange rate which resulted in higher export prices in the face of declining prices in the international market.

#### **Official Prices**

Producer prices were usually revised upwards or at worse retained at their previous years' level. Indeed, the overall rate of increase in most producer prices between 1977 and 1983 more than matched the rate of increase in the consumer price index over the same period, an indication that even the real prices were also stabilized. Unfortunately, however, some upward revisions in the producer prices were not always rational. For instance, no comprehensive cost study was carried out to support some of the increases at the time when world prices were either falling or stable. In the period 1977-1985 average growth rates of producer prices ranged between 4.4 per cent for cocoa and 18.4 per cent for sheanuts. During the period 1986-1993, the producer prices of benniseed, rubber, palm kernel, cotton, soyabeans, cocoa and palm oil recorded substantial increases ranging from 18.9 per cent for palm oil to 103.2 per cent for benniseed (Table 4). This is a reflection of the deregulated market with so much of the gains of marketing domiciled with the producers. However, the trend observed indicated that the world prices were tumbling while domestic prices were on the increase as a result of the naira depreciation. The rational analysis of this development is that the merchants were using the deregulated market to round trip naira, and since there were no marketing checks and balances, it was quite convenient to purchase at such a high producer price, only to sell at a lower price in the world market, knowing that if and when the hard currency is obtained, the liberalized market encouraged their conversion to make enough profit because the depreciated naira brings a quantum of value to the transactions.

Guaranteed minimum prices, like producer prices also increased steadily from 1977 to 1986 when it was abolished. The average growth in prices ranged from 5.9 per cent for milled rice to 21.5 per cent for millet during the period 1977–1986 (Table 5). A comparison of the guaranteed minimum prices with retail prices which are market determined showed that the guaranteed minimum prices for all the crops during the period 1977–1986 were lower than the retail prices (Table 6). This was in consonance with the objective of setting up guaranteed prices which were fall back prices for farmers in the event that they could not sell their produce at the expected market rate. This guaranteed prices were expected to minimize producers' losses. Guaranteed minimum prices as a ratio of farm gate prices, however, showed that in 1979 and 1980, guaranteed prices for all the scheduled commodities, except wheat, were higher than their farm-gate prices. After 1980, there was a reversal (except for rice) that maintained the earlier observed trend.

In the period before the abolition of the commodity board, the take-over prices were fixed such that the boards could buy off commodities from the producers as the "buyer of last resort" Trends in take-over prices are similar to those of corresponding producer prices. The average growth rate between 1977–1985 ranged from 2.4 per cent for ginger to 13.6 per cent for soyabeans (Table 7). The ratios of take-over prices to export prices of scheduled agricultural export commodities showed that for the period 1977–1985 the take-over prices for most of the crops were higher than the export prices. For instance, the take-over prices of cocoa, groundnuts,

soyabeans, palm oil, palm kernels, rubber and copra were 1.4, 46.0, 48.1, 61.5, 75.2, 25.1 and 30.9 per cent higher than their respective export price levels (Table 8).

During the period of marketing boards, sales made by the boards to local processors were to support the policy of backward integration to encourage the use of locally produced raw materials by the industries. Therefore, the local sale prices were fixed from 1977, but were terminated by 1982 due to low demand by the local industries. The local sale prices were higher than the take-over prices which indicated a built-in profit level by the boards (Table 9).

The producer prices were fixed to reflect the developments in the world market. However, the observation was that for very many years, the producer prices, particularly before 1986, were not showing the developments in the world market. At the time the domestic market was booming the producer prices were still lower than the world market. For example, the ratio of producer price to world prices for the period 1977–1985 averaged 74.3, 66.2, 99.3, 126.0, 99.6, 41.4 and 75.1 per cent for cocoa, coffee, soyabean, palm oil, palm kernel, cotton and rubber respectively (Table 10). Only palm oil had its producer price higher than world prices thus implying implicit taxation of other scheduled commodities.

#### PART III

#### **EFFECTS ON DOMESTIC PRICES**

There are basically two vivid reasons why there is inflation. One is that inflation is an integral part of a country's public finances. The other is that inflation continues because it is too hard or too costly to stop as shown in the domestic prices. This section discusses, briefly, trends in consumer price index and the effect of these developments on scheduled food prices.

Keynes, in his classic article indicated that money creation is one way of financing budget deficits. He vividly pointed out how even the weakest government always has one way left to pay its bills, namely, printing money. In the Nigeria context, immediately after the civil war in the early 1970s, inflationary money creation accounts for a significant portion of government revenue. This was compounded by the oil windfall, creating very ambitious development programmes. The sudden drop in oil prices which in turn affected accrued revenue from oil encouraged the use of high powered money in the prosecution of most programmes in the development plans. Alternative revenue to oil revenue had remained costly. The scheduled export crops were not doing well in the world commodity market, tax collection and drive were quite low and unimpressive. Government were into many activities, creating distortions in the product market and crowding out private sector involvement in economic development. As at end of 1993, the government budget deficit in per cent of GDP was estimated at 12.3 per cent, growing from 7.5 per cent between 1987–1990.

#### **Trends in Domestic Prices**

Table 11 indicates the rates of increase in all-items and food price indices. It showed a clear upward movement in the period when the scheduled foodcrops were guaranteed. The market retail prices of scheduled food crops had a strong linkage with the upward movement in the food price index. The increase in the movement of the food price index became sharper between 1988 to 1989 rising to 60 and 50 per cent for all-items and 80 and 60 per cent for food components. The reason adduced for this significant increase in prices was the large government deficits which fuelled inflation while most of the food items were imported and

inputs for producing scheduled food crops (such as fertilizers, pesticides, herbicides etc.) were also imported. The high import content of inputs automatically raised the cost of production which was passed to the market. In 1990, the rate of increase dropped to 10 per cent for both All-items and Food components. This drop was an unusual one attributed to the positive impact of the preparation for political democratisation. The rates started their upward trend the moment the political programmes started derailing. In this case the unsettled political situation encouraged traders to exploit consumers by hoarding food or inflating transportation costs of food products.

Secondly, the high transportation cost was as a result of sharp rise in the prices of petroleum products after the review of the petroleum products prices in 1992.

#### **Trends in Production**

Considering the trend in domestic prices, (Table 11), it was obvious that the higher rates of increase in food prices coincided with smaller and even absolute decline in food supply. For example, the production of rice declined by 9.47 per cent in the period 1977–1995 (Table 12). Higher rates of scheduled food prices increases were recorded during critical production situations such as during the drought of 1983-1984. There were supply bottlenecks and speculation between 1985-1986 before the introduction of the Structural Adjustment Programme. This was attributed to the effects of several macro-economic policies which enlarged aggregate demand. On the other hand, available data showed that there were increases in the output of the export crops from 1977-1985 except for crops such as Benniseed and Cotton.

Between 1986-1993, output of most of the scheduled export crops also increased with a range of 22.57 per cent for cotton to 3.57 per cent for palm-oil (Table 13). Moreover, a corresponding increased proportion of this output was exported owing to the liberalised market situation. The total value of export rose in Naira terms by 10 per cent during the period 1986-1993.

# Food Price Changes and Inflation

The impact of food price changes on the general price level could be measured using the contribution of various consumer items, to the aggregate change in the all-items price index. Table 14 shows the relative contribution of consumer items to average change in all-items index. It is clearly shown that food price changes exert the largest impact on domestic inflation. In the period 1977-1985, food price changes contributed an average of 72.5 per cent to the change in the all-items index. During 1986-1993, the contribution to the all-items price change was the same at 72.7 per cent due, basically, to the fact that most production activities were liberalized while the indirect subsidies placed on some food items were removed.

#### **PART IV**

# ADVANTAGES AND DISADVANTAGES OF MARKET DETERMINED COMMODITY PRICES

The abolition of the commodity board system introduced a dynamic pricing policy into the scheduled commodity market. While the food crop market as indicated by the guaranteed

minimum prices was affected by the depreciating naira exchange rate, commodity prices for the first time were determined by the combined forces of demand and supply. There were some positive and adverse developments that accompanied the demise of the boards. For example, the producer prices of major agricultural export crops increased by multiples and mirrored the world market prices reasonably. For instance, producer price of cocoa which increased by an average of 4.4 per cent during the period 1977-1985 rose to 35.0 per cent during the period 1986-1993. Similarly, palm kernel, cotton and rubber rose from 13.0, 10.7 and 8.7 per cent to 57.3, 46. 3 and 60.3 per cent, respectively. Also, the ratio of producer price to world price which averaged 74.3, 99.3, 126.0 and 99.6 per cent for cocoa, soyabean, palm oil and palm kernel rose to 105.6, 187.6, 129.7 and 112.7 per cent, respectively. Also, the retail prices and farm-gate prices were quite on the increase in relation to the Guaranteed Minimum Prices (GMP). The ratio of the GMP to retail prices varied from crop to crop. For example, beans ranged between 24.7 in 1984 and 57.6 in 1979. Maize ranged between 24.8 in 1981 and 76.0 in 1979, millet rose between 35.4 in 1978 to 99.8 per cent in 1986. Sorghum ranged between 29.2 per cent in 1984 and 90.6 per cent in 1986 while rice (milled) ranged between 20.8 in 1984 to 78.9 in 1979.

The farm-gate prices compared to the guaranteed minimum prices showed quite an interesting development. The ratios of GMP to farm-gate showed that for beans, the ratio ranged between 19.4 per cent in 1986 to 104.9 per cent in 1979. Millet ranged from 27.4 per cent in 1986 and 135.8 per cent in 1979. Sorghum ranged between 28.5 per cent in 1986 to 150.0 in 1980 while rice (paddy) rose from 26.2 per cent in 1986 to 154.5 per cent in 1979 (Table 15). However, the farm-gate prices were almost half of the retail prices for all the food crops until 1985 when the prices rose with ratios ranging above 50 per cent. For example, guinea corn, millet and beans rose from their respective levels of 34.1, 47.3 and 42.0 per cent in 1984 to 74.5, 83.1 and 67.6 per cent in 1985. Maize ranged from 29.0 per cent in 1981 to 79.6 per cent in 1993 (Table 16).

In spite of the good virtues of the price deregulation which allowed the forces of demand and supply to determine commodity prices, there were some observed problems/lapses. Firstly, the urge to earn foreign exchange resulted in the participation of a large number of inexperienced merchants in produce trading, and this resulted in a deterioration of the quality of produce meant for export. Consequently, Nigeria's export commodities which, hitherto, were regarded as premium quality were sold with discounts. Secondly, sharp practices arising from disorderliness exaggerated the actual prices of produce thereby making it virtually impossible for local processors to purchase these commodities which are used as raw materials. Thirdly, there was nothing to cushion the adverse fluctuation in the world prices of commodities, thereby creating uncertainty in farmers'/exporters' income. Guarantee of reasonable level of return on produce and stability of such prices is a sine qua non for the continuation in agricultural business by farmers.

In spite of the shortcomings of the present commodity pricing system, there are high prospects if the few lapses are improved upon. Naturally, the climax of a free marketing system where efficient distribution of agricultural produce in particular and the encouragement of their export, is the establishment of commodity exchange market which will be principally private sector initiatives. Commodity exchanges world wide evolved out of the need to manage risks associated with price fluctuations in markets for various commodities.

The commodity exchange markets if established could provide a forum for the pursuit and attainment of agricultural price and produce marketing policy objectives, in place of the abolished TCPP. In addition, the commodity exchange market would fill the vacuum created by the absence of buyer of last resort in the system. Apart from price protection, the market would serve as a financial management tool for hedgers to stabilize income and reduce procurement and inventory costs as well as expand borrowing ability. Luckily, most of the agricultural commodities produced in Nigeria are suitable for trading on the exchange.

Establishing commodity exchange also has economic benefits to the nation as follows:

- (i) **Price Risk Management:** This is a fall out of risk-shifting mechanics in hedging. Hedging enables a primary commodity producer or a manufacturer to price-fix his products long before production thereby minimizing revenue losses due to unfavourable price changes.
- (ii) Improved Financing Terms: It enhances the credit-worthiness of commercial enterprises in their relationship with banks who, no doubt, can give better financing terms since they are not exposed to price risk.
- (iii) Efficient Management of Stock and Improvement of Cash Flow: Traders could make use of the futures market either to get their commodity in order to fulfil a contractual obligation or have surplus money to buy spot commodity and sell forward to earn differential or to sell their surplus commodity and make use of the money available for some other use.
- (iv) Enhanced Production: Commodity exchange provides an opportunity for stabilising incomes from operations through hedging. This is capable of sustaining the interest of producers and hence trigger a steady rate of growth in production.
- (v) Improved Long-Term Planning: In economic planning, price trend is a critical variable and because, commodity exchange markets provide prices which are good indicators of future price levels, they therefore represent varitable tools for an improved planning process.
- (vi) Efficiency in the Market Process: Futures markets are usually characterised by an excellent information flow, greater competition, a large volume of trade or turn over, easy access, etc. All these are the ingredients for an efficient marketing system, and they result in moderate costs of performing marketing functions. They ease the process of executing orders which in turn benefits producers, merchants processors, consumers, etc.
- (vii) Effective Protection for Market Participants: Trading in a futures market is normally subject to specified rules and regulations. These rules, together with a clearing house mechanism which guarantees contract performance, provide adequate protection for market participants.
- (viii) Accelerated Improvement in Infrastructure: Because the operations of the commodity exchanges depend to a large extent on the quality of infrastructural facilities such as telephone, telex, fax, radio etc., they usually serve as catalyst, inducing the authorities to provide and/or improve the state of these infrastructural facilities.

(ix) Device for Internationalising Local Markets: The focal direction of future markets is in the international scene. The setting up of the commodity exchange would likely improve the quality and packaging of commodities which would now conform with international standards.

In conclusion, commodity exchange market when established in Nigeria requires experienced traders which is lacking in the system. Because of this problem, there is need for practical learning from the existing commodity exchanges in other part of the world. Secondly, the poor state of our infrastructural facilities needs to be improved. Moreover, standardization of commodities to the internationally accepted grades needs to be effected. Finally, because of its peculiarities, the Nigerian government could invite the Kuala Lumpur experts from their commodity exchange to consult for Nigerian Commodity Exchange and assist in its take-off. When the exchange is established it will, on its own, create awareness and incentives to local producers, consumers and traders. It will also induce greater financial expertise and sophistication, and futures contracts will be more suitable to local needs.

#### PART V

#### SUMMARY AND CONCLUSION

The primary aim of the paper is to review and analyse the various prices which have come into existence in the agricultural sector since the re-organization of the produce marketing system in 1977 to the present free market system. It also x-rayed and analysed the trends in the various agricultural prices since 1977 when the commodity marketing system was re-organized as well as highlighted the problems and prospects of the current pricing system.

It was observed that a close relationship existed between free market prices and officially determined prices. Analysis showed that all the officially determined prices moved upwards during the period 1977–1985, in line with government policies of ensuring price stability and steady incomes for producers of these commodities. However, some upward revisions in producer prices were not always rational. The official prices as ratios of world market prices indicated that most commodities have been implicitly taxed during the period 1977–1985 as the official prices were substantially lower than the world prices. The free market prices also fluctuated upwards. The increase in free market prices were more pronounced during the period 1986–1993. The current marketing system resulted in increases in producer prices of major agricultural export crops and mirrored the world market prices reasonably. The problems of the current marketing/pricing system were identified to include exaggerated prices which did not reflect actual prices of produce, deterioration of quality of produce exported and the absence of a "buyer of last resort" which could jolt farmers in times of surplus.

It was, however, observed that despite the shortcomings of the present system, free-market pricing remained the best option and the long term objective of most country's pricing policies. The establishment of commodity market exchange to take care of all the observed lapses is suggested.

Akanji and Ukej

TABLE 1

AVERAGE FARM-GATE PRICES OF SCHEDULED FOOD CROPS: 1977 – 1993
(N/Tonne)

Year	Guinea Corn	Millet	Maize	Beans	Wheat	Rice (Paddy)	Rice (Milled)
1977	160	159	199	337		224	380
1978	173	171	171	384		180	393
1979	145	162	145	329	290	213	397
1980	140	154	173	332	297	239	499
1981	221	233	246	547	234	281	613
1982	245	358	315	567	272	332	541
1983	233	336	572	707		575	
1984	421	470	627	1,020		883	<b>l</b> –
1985	630	660	650	1,410	<b>–</b>	1,040	
1986	665	696	686	1,488	*****	1,087	
1987	830	597	611	2.394	<b> </b>	2,313	
1988	1,630	1,472	1,891	4,423		4,219	_
1989	2,017	2,096	2,735	5,420		6,322	
1990	1,703	1,707	2,061	5,632		6,300	
1991	3,648	3,365	3,318	7,915		7,544	
1992	4,678	5,681	5,514	9,145		12,606	<u> </u>
1993	6,620	8,674	6,606	17,157	<u> </u>	18,184	
Average Growth:					0.6		
1977 1985	20.3	19.6	17.2	19.6	-0.6	21.2	6.9
1986 – 1993	33.7	44.3	29.2	33.4		22.7	-

Source: Based on surveys conducted by the Central Bank of Nigeria.

TABLE 2

AVERAGE MARKET (RETAIL) PRICES OF SCHEDULED FOOD CROPS: 1977 – 1993
(N/Tonne)

Year	Guinea Corn	Millet	Maize	Beans	Wheat	Rice (Milled)
1077	201	200	262	613		600
1977	291	290	262	l e	*******	692
1978	315	311	310	698		715
1979	268	295	263	599	573	722
1980	254	281	314	605	539	907
1981	414	442	848	999		1,238
1982	517	558	724	1,059	-	1,062
1983	581	534	719	1,317		1,237
1984	1,233	994	1,032	2,426	-	2,863
1985	846	794	877	2,085		2,654
1986	635	576	714	2,079	<u></u>	2,376
1987	615	595	838	2,382		2,358
1988	1,611	1,621	1,520	3,738		3,787
1989	1,979	1.645	2,115	4,581		6,439
1990	1,859	1,828	1,624	5,026	_	5,862
1991	3,425	3,368	2,875	5,891		7,510
1992	4,810	4,730	4,525	7,437	_	13,082
1993	5,438	5,348	5,557	14,595		16,821
Average Growth:						
1977 - 1985	18.8	15.8	22.9	18.5	-	21.4
1986 – 1993	45.4	44.3	34.5	23.5		32.5

Source: Returns from State Ministries of Agriculture and Central Bank of Nigeria National Survey.

Akanji ana Ukeje

TABLE 3

WORLD (C.LF) PRICES OF SCHEDULED EXPORT COMMODITIES: 1977 – 1993
(N/Tonne)

Year	Benniseed	Cocoa	Coffee	Cotton	Copra	Groundnut	Groundnut Oil	Ginger	Soyabean	Palm Oil	Palm Kernel	Rubber
19 <b>7</b> 7	445	2,743	3,317	1,032	264	321	644	1,621	178	339	215	840
1978	562	2,112		1,072	283	379	714	1,692	185	381	239	887
1979	537	2,007	•	1,114	406	343	516	2,283	166	397	305	814
1980	490	1,456		1,330	248	270	466	913	181	323	188	836
1981	491	1,289	,	1,181	229	386	636	698	169	343	174	731
1982	397	1,201	1.497	1,073	209	288	392	757	216	302	177	597
1983		1,645	1,833	1,321	391	452	522	1,538	222	390	240	800
1984		2,013	2,345	1,339	532	804	756	2,059	205	532	398	833
1985		2,308	2,379	1,170	349	730	825	2,151	334	444	268	714
1986	_	3,833	5,291	1,837	301	_	820	1,427	596	512	254	1,921
1987		7,966	9,660	6,577	1,219		2,045	4,658	947	1,282	744	3,888
1988		7,169	10,688	7,588	1,737	2,857	2,641	4,163	1,479	2,110	1,121	5,392
1989		7,168	14,972	11,234	2,465	·	5,656	5,748	2,479	2,622	1,858	7,223
1990		7,560	12,683	14,796	1,857		7,751	7,727	1,993	2,282	1,529	7,119
1991		11,793	14,619	16,739	1,936		9,109	9,901	2,407	3,334	2,423	
1992		19,249	20,058	21,990	6,489		10,282	14,918	4,196	6.258	6,895	_
1993		25,147	29,913	28,419	6,506		14,929	18,260	5,734	8,405	8,405	35,901
										· · · · · · · · · · · · · · · · · · ·		
Average Growth:												
1977 – 1985	1.0	6.0	12.3	7.5	9.4	14.5	6.5	11.8	21.2	5.7	6.3	15.2
1986 – 1993		20.8	19.6	24.1	75.6	<u> </u>	50.7	48.7	33.7	38.6	52.0	17.8

Source: Compiled from Public Ledger and Financial Times.

TABLE 4

PRODUCER PRICES OF SCHEDULED EXPORT COMMODITIES: 1977 – 1993
(N/Tonne)

Year	Cocoa	Coffee	Benniseed	Soyabeans	Palm Oil	Palm Kernel	Sheanuts	Cotton	Rubber	Copra	Ginger
1977	1,030		290	130	355	150	_	330	365	_	
1978	1,030	:	300	135	355	150	70	330	365		650
1979	1,200		300	135	450	180	90	330	420	230	650
1980	1,300		315	150	450	200	100	400	485	245	650
1981	1,300		315	150	495	230	100	465	600	245	650
1982	1,300	1,155	315	175	495	230	120	510	700	245	650
1983	1,400	1,255	360	230	495	230	140	560	700	300	750
1984	1,500	1,405	360	300	600	400	160	700	750	300	850
1985	1,500	1,405	360	500	600	400	250	800	750	·	950
1986	3,500	4,000	360	1,500	1,000	400	275	1,000	1,200	_	950
1987	7,500	5,500	2,295	1,550	1,200	850		4,000	1,000	_	1,200
1988	11,000	6,000	2,000	2,000	1,500	1,000		4,500	1,500	_	1,500
1989	10,100	7,464	5,120	4,030	1,310	1,800		2,433	2,000	_	2,873
1990	8,500	6,680	4,410	4,920	1,160	2,000	٠ ـــــ	2,600	1,395		3,480
1991	10.158	8,750	5,979	3,960	_	2,525	_	4,163	5,300	_	n.a.
1992	12,745		9,792	7,225	12,472	5,692		3,7 <b>7</b> 8	12,520	-	9.695
1993	25,278		13,388	11,688	20,836	10,567			16,290	_	10.745
Average Growth:	I			I	1					1	
1977 – 1985	4.4	5.2	2.8	17.8	6.4	13.0	18.4	10.7	8.7	3.8	5.0
1986 – 1993	35.0	15.3	103.2	35.1	18.9	57.3		46.3	60.3	_	29.1

Source: Secretariat of Technical committee on Produce Prices (TCPP).

CBN Nationwide Survey, Agricultural Project Monitoring and Evaluation Unit (APMEU) Bulletin on Prices and NAERLS Bulletin on Prices.

lkanji and Ukeje

TABLE 5

GUARANTEED MINIMUM PRICES OF PRICES OF SCHEDULED FOOD CROPS: 1977–1986 1/
(N/Tonne)

Year	Beans	Maize	Millet	Sorghum	Wheat	Rice (Milled)	Rice (Paddy)
1977	180	130	110	110		400	240
1978	180	. 130	· 110	110	200	400	240
1979	345	200	220	210	235	570	329
1980	345	200	220	210	235	570	329
1981	362	210	231	220	247	596	345
1982	362	210	231	220	280	596	400
1983	362	210	231	220	280	596	400
1984	600	350	360	360	400	596	500
1985	600	450	500	500	450	_	700
1986	690	520	-575	575	520	<del>-</del>	1,000
Average Growth:	17.7	17.0	21.5	21.3	10.7	5.9	16.6

<sup>1/</sup> The scheduled food crops prices were not fixed from 1987 when the Commodity Boards were abolished.

Source: Secretariat of Technical Committee on Produce Prices (TCPPC)

TABLE 6

RATIOS OF GUARANTEED MINIMUM PRICES OF PRICES TO RETAIL PRICES: 1977 – 1986 (Per cent)

Year	Beans	Maize	Millet	Sorghum	Wheat	Rice (Milled)	Rice (Milled)
19 <b>7</b> 7	29.4	49.6	37.9	37.8	_	57.8	_
1978	25.8	41.9	35.4	34.8		55.9	_
1979	57.6	76.0	74.6	78.4	41.0	78.9	<del></del>
1980	57.0	63.7	78.3	82.7	43.6	62.8	<del></del>
1981	36.2	24.8	<b>52</b> .3	53.1	· <del></del>	27.9	
1982	34.2	29.0	41.4	42.6		56.1	_
1983	27.5	29.2	43.3	37.9	· <u> </u>	48.2	
1984	24.7	33.9	36.2	29.2		20.8	_
1985	28.8	51.3	63.0	59.1		22.5	
1986	33.2	72.8	99.8	90.6			<b>—</b> .

Akanji and Ukeji

TABLE 7

COMMODITY BOARD TAKE-OVER PRICES OF SCHEDULED EXPORT COMMODITIES: 1977–1985 1/

Year	Cocoa	Coffee	G/nuts	Benisced	Soyabeans	Palm Oil	Palm Kernel	Sheanuts	Cotton	Rubber	Copra	Ginger 2/ (P)
1977	1,430	1.299		403	214	428	311		528	566	_	
1978	1,430	1,299	402	413	219	483	311	183	528	566	294	763
1979	1,600	1,299	487	423	226	583	341	213	541	621	324	773
1980	1,700	1,299	557	438	241	628	361	223	611	686	339	773
1981	1,700	1,355	597	448	255	628	391	233	688	801	339	773
1982	1,700	1.355	597	448	275	628	391	253	733	901	339	773
1983	1,850	1,455	597	497	330			274	784		<del></del>	873
1984	1,990	1,666	808	505	430	741	605	305	937	1,523	403	834
1985	2,595		903	505	630	741	605	395	1,037	1,523	403	934
Average Growth:										1	1	
1977 – 1985	7.2	3.3	10.0	2.6	13.6	6.6	8.7	9.3	8.0	13.2	3.7	2.4

<sup>1/</sup> Prices were not fixed as from 1987 when the Boards were abolished.

Source: Commodity Board Returns to Central Bank of Nigeria.

<sup>2/</sup> Peeled ginger.

TABLE 8

RATIOS OF TAKE-OVER PRICES TO EXPORT (CIF) PRICES OF SCHEDULED AGRICULTURAL EXPORT COMMODITIES: 1977–1985
(Per cent)

Year	Cocoa	Coffee	G/nuts	Beniseed	Soyabeans	Palm Oil	Palm Kernel	Sheanuts	Cotton	Rubber	Copra	Ginger
1977	52.1	39.2		90.6	120.2	126.3	144.7	_	51.2	67.4		
1978	67.4	76.4	106.1	73.5	118.4	126.8	130.1		49.3	63.8	103.9	45.1
1979	79.7	61.4	142.0	79.2	136.1	146.9	111.8		48.6	131.1	79.8	33.9
1980	116.8	74.3	206.3	89.4	133.1	194.4	192.0.		45.9	82.1	160.9	84.7
1981	131.9	106.7	154.7	91.2	150.9	183.1	224.7		58.3	109.6	148.0	110.7
1982	141.5	90.5	207.3	112.8	127.3	207.9	220.9		68.3	150.9	162.0	102.1
1983	112.5	79.4	132.1		148.6		_		59.3			
1984	98.7	71.0	100.5		209.8	139.3	152.0	<del></del>	70.0	182.8	_	1
1985	112.4		123.7	*****	188.6	166.9	225.7		58.6	213.3		
verage Growth:	101.4	74.4	146.0	89.5	148.1	161.5	175.2	-	59.9	125.1	130.9	75.3

Akanji ana Ukeji

TABLE 9

COMMODITY BOARD LOCAL SALE PRICES OF SCHEDULED EXPORT COMMODITIES 1977–1986

Year	Cocoa	Coffee	G/nuts	Benisced	Soyabeans	Palm Oil	Palm- Kernel	Sheanuts	Cotton	Rubber	Copra	Ginger
1977	2,727				*****	316	184		1,006			
1978	2,079	1,672	355	535	151	358	208	184	1,048	<b>7</b> 87	370	1.665
1979	1,964	2,087	320	509	158	373	274	186	1,090	809	221	2.256
1980	1,413	1,721	247	462	139	299	157	196	1,300	703	202	885
1981	1,246	1,243	363	464	154	320	164	207	1,157	774	202	671
1982	1,246	1,243	363	464	142	320	147	228	1,050	755	202	671
1983							·			******		*****
1984				*****	******			·				
1985								:	_		_	
1986	_	•	_	_	_	_	_	. · · · · · · · · · · · · · · · · · · ·	_	_		_

Source: Commodity Board Returns to Central Bank of Nigeria.

TABLE 10

RATIOS OF PRODUCER PRICES TO EXPORT PRICES (Per cent)

Year	Cocoa	Coffee	G/nuts	Beniseed	Soyabeans	Palm Oil	Palm Kernel	Sheanuts	Cotton	Rubber	Copra	Ginger
1977	37.6	_		65.2	73.0	104.7	69.8		32.0	43.5		_
1978	48.5			53.4	73.0	93.2	62.8		30.8	41.1		38.4
1979	59.8	l —	<u> </u>	56.2	81.3	113.4	50.0	_	29.6	51.6	56.7	28.5
1980	89.3			64.3	82.9	139.3	106.4		30.1	58.0	98.8	71.2
1981	100.9			64.2	88.8	144.3	132.2	_	39.4	82.1	107.0	93.1
1982	108.2	77.2		79.3	103.3	163.9	129.9		47.5	117.3	117.2	85.9
1983	85.1	68.5			106.5	126.9	95.8	<del></del> .	42.4	87.5		
1984.	74.4	59.9			135.1	112.8	100.5		52.3	90.0		
1985	65.0	59.1	<u> </u>	-	149.7	135.1	149.3	_	68.1	105.0	_	_
1986	91.3	75.6	1 —		251.7	195.3	157.5		54.4	62.5		•
1987	94.2	56.9			163.7	93.6	114.2		60.8	25.7		
1988	153.5	561	<b>!</b>		135.2	71.1	89.2		59.3	27.8		
1989	140.9	49.9	l —	<u> </u>	162.6	50.0	96.9	_	21.7	27.8		
1990	112.4	52.7	_		246.9	50.8	130.8		17.6	19.6		
1991	86.1	59.9	l —		164.5		104.2	_	24.9	_		
1992	66.2				172.2	199.3	82.6		17.2			
1993	100.5	_	l —		203.8	247.9	125.9	<del></del>	_	45.4	<u> </u>	

TABLE 11

RATES OF INCREASE IN CONSUMER PRICES
(Based 1985 = 100)

	Consum	er Price Index	Rat	e of Increase
Year	All Items	Food Components	All Items	Food Component
1977	29.6	29.3	20.0	20.0
1978	34.5	34.5	20.0	20.0
1979	38.5	37.3	20.0	10.0
1980	42.3	40.1	10.0	10.0
1981	51.2	50.2	30.0	30.0
1982	55.1	54.6	24.0	10.0
1983	67.9	67.3	30.0	30.0
1984	94.8	96.2	40.0	50.0
1985	100.0	100.0		
1986	102.4	100.1	10.0	
1987	116.1	108.7	10.0	10.0
1988	181.2	195.3	60.0	80.0
1989	272.7	298.1	50.0	60.0
1990	293.2	308.0	10.0	10.0
1991	330.9	345.9	20.0	20.0
1992	478.4	506.8	50.0	50.0
1993	751.9	800.2	60.0	60.0
977 1985 1/	57.1	56.7		
986 1993 1/	316.3	295.9		

TABLE 12
OUTPUT OF MAJOR SCHEDULED FOOD CROPS: 1977–1993
('000 Tonnes)

Year	Guinea Corn	Maize	Millet	Beans	Wheat	Rice
1977	3,286	650	2,579	408	20	410
1978	2,409	658	2,386	498	20	280
1979	2,604	488	2,366	624	22	160
1980	3,346	612	2,354	510	24	105
1981	3,364	720	2,682	560	26	158
1982	3,740	760	2,666	616	26	212
1983	3,292	594	2,783	583	26	145
1984	4,608	2,058	3,349	· 477	27	157
1985	4,911	1,190	3,684	611	113	196
1986	5,455	1,336	4,111	732	132	283
1987	5,455	4,612	3,905	688	139	808
1988	5,182	5,268	5,136	887	565	2,081
1989	7,265	5,277	4,770	1,232	554	3,303
1990	4,185	5,596	5,136	1,354	554	2,500
1991	4,346	6,085	4,109	1,352	455	3,185
1992	4,437	6,587	4,234	1,411	423	3,500
1993 1/	4,548	7,185	4,380	1,471	400	3,400
Average Growth:				:		
1977 – 1985	6.24	1.51	22.90	5.94	38.86	-9.47
1986 – 1993	1.54	1.44	37.90	12.49	37.04	57.03

Akanji and Ukeje

TABLE 13

OUTPUT OF MAJOR SCHEDULED EXPORT CROPS: 1977–1993
('000 Tonnes)

Year	Benniseed	G/nuts	Cocoa	Coffee	Cotton	Copra	Groundnut Oil	Soya- beans	Palm Oil	Palm Kernel	Rubber
1977	37	193	3	67	23	567	n.a.	70	528	284	59
1978	38	157	3	53	23	801	n.a.	72	530	281	58
1979	39	151	3	31	22	507	n.a.	<b>7</b> 3	650	280	56
1980	41	153	4	19	22	674	n.a.	75	650	279	45
1981	42	174	3	12	25	530	n.a.	78	530	284	60
1982	44	156	3	10	28	458		82	500	310	50
1983	30	140	3	3	25	396	_	42	500	279	45
1984	31	140	4	27	25	591	-	43	550	340	58
1985	35	160	6	29	25	621		60	615	360	226
1986	35	148	6	25	26	896		100	650	727	190
1987	34	100	6	49	26	687		107	715	824	180
1988	- 36	253	10	49	27	1,016	280	150	614	545	211
1989	40	256	257	47	2 <b>7</b>	1,017	249	300	770	939	132
1990	44	244	303	69	30	1,166	359	216	730	1,190	147
1991	46	268	320	75	32	1,361	361	145	760	1,203	215
1992	49	292	338	86	34	1,297	384	159	792	1,321	220
1993 1/	52	306	358	95	35	1,323	408	163	825	1,450	225

Average Growth:

· · · · · · · · · · · · · · · · · · ·				<b>.</b>				,			
1977 – 1985	-3.09	1.04	9.00	-14.00	1.00	12.04		0.02	7.08	3.46	42.17
1986 – 1993	5.70	18.10	5.64	22.57	3.85	4.84	7.70	12.30	3.57	12.38	4.58

<sup>1/</sup> Provisional.

TABLE 14

	AVERAGE CPI 1985 = 100					% CHANGE IN ALL-ITEMS INDEX BETWEEN			% CONTRIBUTION TO CHANGE IN ALL-ITEMS INDEX			
	19701975 (1)	1976–1980 (2)	1981–1985 (3)	1986–1993 (4)	(1) & (2)	(2) & (3)	(3) & (4)	1970–1975	19761980	1981–1985	1986199	
All-Items	14.1	34.1	73.8	316.2	138.5	116.4	328.5	100.0	100.0	100.0	100.0	
Food	13.1	33.1	73.7	332.9	152.7	122.7	351.7	81.8	65.9	69.8	72.7	
Drinks, Tobacco & Kola	17.7	35.8	68.7	296.0	102.3	91.9	330.9	7.6	4.9	4.5	4.4	
Clothing & Footwear	11.6	26.4	72.6	278.6	127.6	175.0	283.7	4.9	3.6	4.7	4.1	
Accommodation, Fuel & Light		55.2	86.9	227.9	·	57.4	162.3	-	18.8	14.1	8.5	
Household Goods	<del></del>	27.4	66.2	380.3		141.6	474.5		2.8	3.2	4.3	
Medical Care & Health Expenses		_		330.7					_	_	1.2	
Transportation	20.1	45.3	76.7	300.4	125.4	69.3	291.7	4.2	3.1	2.5	2.2	
Recreation, Entrtainment, Education & Cultural Servies				337.5			·		·		1.5	
Other Services	13.5	27.2	70.1	274.7	101.5	157.7	291.9	1.5	0.9	1.2	1.1	

Source: Derived from Consumer Price Indices of FOS, Lagos.

Akanji and Ukeje

Rice Rice Year **Beans** Maize Millet Sorghum Wheat (Milled) (Paddy) 1977 53.4 65.3 69.2 68.8 105.3 107.1 1978 46.9 76.0 64.3 63.6 69.0 101.8 133,3 1979 104.9 137.9 135.8 144.8 79.1 143.6 154.5 1980 103.9 115.6 142.9 150.0 100.4 114.2 137.7 1981 66.2 85.4 64.5 99.5 90.8 48.3 122.8 1982 63.8 66.7 68.8 89.8 110.2 120.5 1983 51.2 36.7 48.1 94.4 69.6 1984 58.8 55.8 54.5 85.5 56.6 1985 42.6 69.2 39.6 79.4 67.3 1986 19.4 33.3 27.4 28.5 26.2

TABLE 15

RATIOS OF GUARANTEED MINIMUM PRICES TO FARM-GATE PRICES: 1977 – 1986
(Per cent)

TABLE 16

RATIOS OF FARM-GATE PRICES TO RETAIL PRICES: 1977 – 1986 (Per cent)

Year	Beans	Maize	Millet	Sorghum	Wheat	Rice (Milled)	
1977	55.0	76.0	54.8	55.0		54.9	
1978	54.9	55.2	55.0	• 55.0	<del></del>	55.0	
1979	54.1	55.1	54.2	54.9	50.6	55.0	
1980	55.1	55.1	54.8	54.9	55.1	55.0	
1981	53.4	29:0	52.7	54.8		49.5	
1982	47.4	43.5	64.2	53.5	· — .	50.9	
1983	40.1	79.6	62.9	53.7			
1984	34.1	60.8	47.3	42.0			
1985	74.5	74.1	83.1	67.6		_	
1986		_					

#### REFERENCES

- 1. CBN/NISER National Study (1992); Impact of SAP on Nigerian Agriculture and Rural Life; Lagos.
- 2. CBN: Report of the Interministerial Committee on The Establishment of a Commodity Exchange in Nigeria CBN's Research Department Occasional Paper No. 5, Lagos.
- 3. Inang, E. E. and Ukpong, G. E. (1993); A Review of Small-Scale Enterprises Credit Delivery Strategies in Nigeria CBN's Research Department Occasional Paper No. 5, Lagos.
- 4. Leonard, Muller (1977); Agricultural Credit and Finance in Africa, New York: Rockefeller Foundation.
- 5. Newbery, D. M. C. and Stiglitz, J. E. (1981); The Theory of Commodity Price Stabilization: A Study in Economics of Risk. Oxford Press.
- 6. Scandizzo, Pasquael and Colin, Bruce (1980); Methodologies for Measuring Intervention Effects, World Bank,
- 7. Timmer, C. P. (1986); Getting Prices Right: The Scope and Limits of Agricultural Price Policy.